

Title (en)

SPECTRALLY COMPENSATED FIBER AMPLIFIER SYSTEM

Title (de)

SPEKTRAL KOMPENSIERTES FASERVERSTÄRKERSYSTEM

Title (fr)

SYSTÈME D'AMPLIFICATEUR À FIBRE À COMPENSATION SPECTRALE

Publication

**EP 3776757 B1 20220420 (EN)**

Application

**EP 19710238 A 20190225**

Priority

- US 201815942240 A 20180330
- US 2019019378 W 20190225

Abstract (en)

[origin: US2019305505A1] A fiber amplifier system including a plurality of optical components in an amplification chain that are responsive to a seed beam and that cause frequency modulation (FM) to amplitude modulation (AM) conversion to the seed beam that creates a non-uniform spectral transmission having a transmission function, where one of the optical components is a fiber amplifier generating an amplified output beam. A programmable spectral filter is controlled to pre-distort the seed beam by applying an inverse of the transmission function that creates a net uniform transmission function by equalizing a net spectral transmission profile of the seed beam at an end of the amplification chain to reduce the amplitude modulation.

IPC 8 full level

**H01S 3/00** (2006.01); **H01S 3/067** (2006.01); **H01S 3/10** (2006.01); **H01S 3/13** (2006.01); **H01S 3/23** (2006.01)

CPC (source: EP US)

**H01S 3/04** (2013.01 - US); **H01S 3/06754** (2013.01 - EP US); **H01S 3/10015** (2013.01 - EP US); **H01S 3/1003** (2013.01 - US); **H01S 3/10038** (2013.01 - US); **H01S 3/10053** (2013.01 - US); **H01S 3/10061** (2013.01 - US); **H01S 3/1301** (2013.01 - EP US); **H01S 3/1306** (2013.01 - EP US); **H01S 3/1308** (2013.01 - EP US); **H01S 3/2308** (2013.01 - US); **H01S 3/2391** (2013.01 - EP US); **H01S 3/005** (2013.01 - EP US); **H01S 3/0085** (2013.01 - EP US); **H01S 3/1003** (2013.01 - EP); **H01S 3/1305** (2013.01 - EP US); **H01S 2301/02** (2013.01 - EP US); **H01S 2301/03** (2013.01 - EP US)

Designated contracting state (EPC)

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DOCDB simple family (publication)

**US 10756504 B2 20200825**; **US 2019305505 A1 20191003**; EP 3776757 A1 20210217; EP 3776757 B1 20220420; JP 2021520076 A 20210812; JP 7254901 B2 20230410; WO 2019190668 A1 20191003

DOCDB simple family (application)

**US 201815942240 A 20180330**; EP 19710238 A 20190225; JP 2021502696 A 20190225; US 2019019378 W 20190225